

# The Role of Workforce Development in Rural Economies

Mark Goodman, President, Goodman and Associates

Jay Moon, President & CEO, Mississippi Manufacturers Association



## Workforce Challenges & Opportunities

- ✓ Company Perspective
- ✓ Training Delivery and Support Perspective
- ✓ Community Leadership Perspectives



## Workforce Matters ...

Area Development Corporation's survey of corporate executives (Top 20)

Site Selection Factors	2018
1	Availability of Skilled Labor
2	Labor Costs
3	Highway Accessibility
4	Corporate Tax Rates
5	Tax Exemptions
6	Quality of Life
7	State and Local Incentives
8	Energy Availability and Cost
9	Available Buildings
10	Occupancy/Construction Costs
11	Available Land
12	Low Union Profile
13	Proximity to Suppliers
14	Proximity to Major Markets
15	Right-to-Work State
16	Training Programs/Tech Colleges
16t	Environmental Regulations
18	Inbound/Outbound Shipping Costs
19	Expedited Permitting
20	Accessibility to Major Airport



Source: http://www.areadevelopment.com/corpSurveyResults/

Growing our Human Resource ✓ Training **BUSINESS DEVELOPMENT** ✓ Retaining ✓ Engaging **COMMUNITY DEVELOPMENT** WORKFORCE **DEVELOPMENT**  Growing our Human Resource **✓** Training **BUSINESS DEVELOPMENT** ✓ Retaining ✓ Engaging **COMMUNITY DEVELOPMENT WORKFORCE DEVELOPMENT**  Growing our Human Resource ✓ Training **BUSINESS DEVELOPMENT √** Retaining ✓ Engaging **COMMUNITY DEVELOPMENT** WORKFORCE **DEVELOPMENT**  Growing our Human Resource ✓ Training **BUSINESS DEVELOPMENT** ✓ Retaining ✓ Engaging **COMMUNITY DEVELOPMENT** WORKFORCE **DEVELOPMENT** -Next Generation -Local Partners

## **Engaging High Need Individuals**

- ✓ Displaced persons with non-transferrable skill sets
- ✓ Workforce age persons who have not participated in the workforce for a significant length of time
- ✓ People dealing with significant socioeconomic disparities
- ✓ Foreign-born workers facing language and cultural barriers
- ✓ People with disabilities who wish to participate in the workforce
- ✓ Veterans
- Persons with backgrounds



Growing our Human Resource ✓ Training **BUSINESS DEVELOPMENT** ✓ Retaining ✓ Engaging **COMMUNITY DEVELOPMENT** WORKFORCE **DEVELOPMENT**  Growing our Human Resource **REGIONAL** ✓ Training **BUSINESS DEVELOPMENT** ✓ Retaining ✓ Engaging **COMMUNITY DEVELOPMENT** WORKFORCE **DEVELOPMENT** 

## Competing Today

- ✓ Have a Good Census Count
- ✓ Think (and Act) Regionally
- Engage the Next Generation
- ✓ Be Active vs. Passive





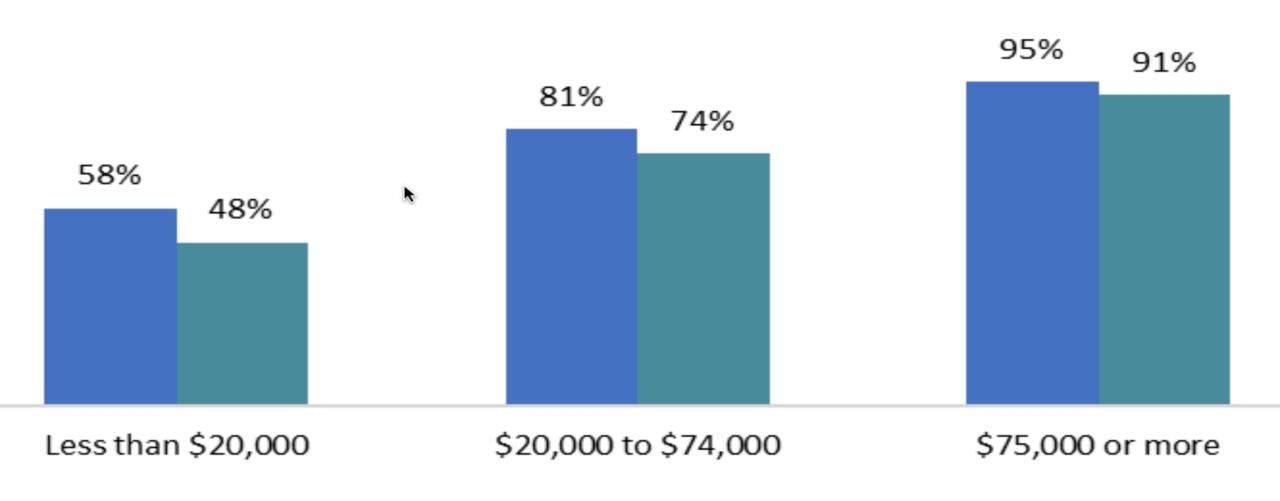
## Competing Today

- ✓ Have a Good Census Count
- Now through April 2020
- -Challenge: Rural Internet Connectivity
- -Hard-to-Count Populations and Regions





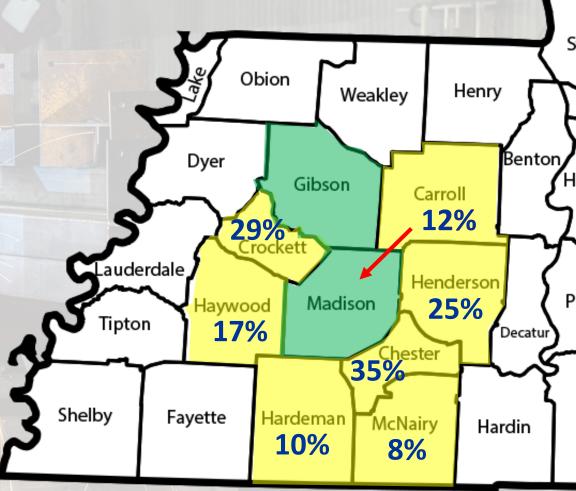
### Percent of Housholds with Broadband Subscriptions by Income



■ Metropolitan Households
■ Rural Households

## Competing Today

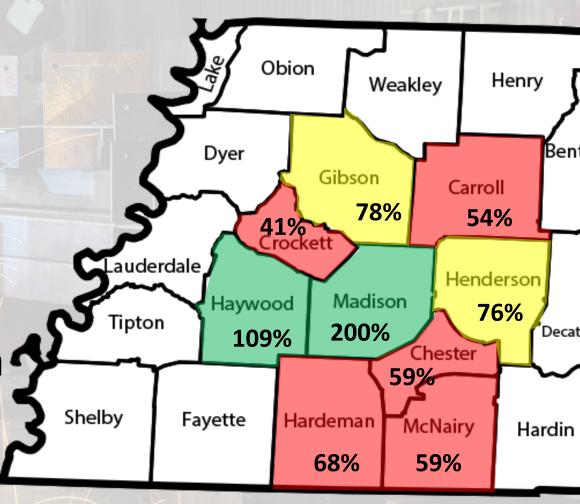
- ✓ Have a Good Census Count
- ✓ Think (and Act) Regionally
- Engage the Next Generation
- ✓ Be Active vs. Passive





## Competing Today

- ✓ Have a Good Census Count
- ✓ Think (and Act) Regionally
- Engage the Next Generation
- ✓ Be Active vs. Passive

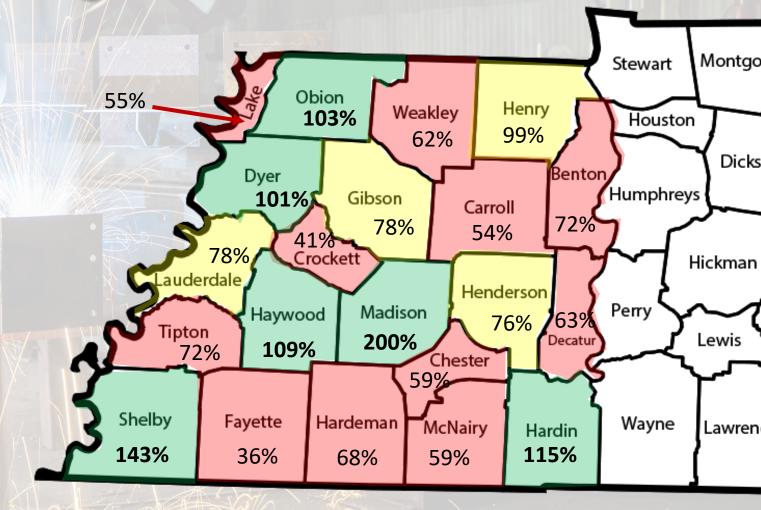




## Retail Capture/Leakage

### Think about ...

- ➤ Online Shopping
- > Sales Taxes
- City Budgets
- > Economic Impact





## Competing Today

- ✓ Have a Good Census Count
- ✓ Think (and Act) Regionally
- ✓ Engage the Next Generation
- ✓ Be Active vs. Passive





## Competing Today

- ✓ Have a Good Census Count
- ✓ Think (and Act) Regionally
- Engage the Next Generation
- ✓ Be Active vs. Passive



Source: U.S. Census Bureau, 2018



## Transition to a Knowledge/Innovation Economy

- Globalization
- Technology Application
- Education and WorkforceDevelopment
- Human Capital
- Financial Capital
- ✓ Start-up or Fast Growth Companies
- ✓ Digital Infrastructure





## Globalization

- ✓ Advanced technologies have led to greater national and international business mobility
- Competition among countries, regions and cities of the world to attract and retain new and existing business and investment is intense.
- ✓ Businesses can chose from locations in an increasing number of communities with location advantages that meet their needs
- ✓ Competition, suppliers, customers are global





## The 30 Technologies of the Next Decade

#3 Mobile/Social Internet

Advancements - Search/Social/

Messenging/Livestreams

#8 Immersive Media

#VR/ #AR/ #MR/ 360°/

Video?Gaming

#13 EnergyTech

& Decentralized Grid

#18 Health Tech.

Advanced Genomics.



#### #1 Artificial Intelligence Al /Machine Learning / Deep

Learning



#### #6 Automation

Information, Task, Process, Machine, Decision & Action



#### #11 3D Printing

Additive Manufacturing & Rapid Prototyping



#### #16 Nanotechnology

Computing, Medicine, Machines + Smart Dust



#### #21 Advanced Materials

Composites, Alloys, Polymers, Biomimicry, Nanomanufacturing Paper, Feedback & Exoskeletons



#### **#26 Smart Cities**

+ Infrastructure & Transport



#### #2 Internet of Things

IOT, IIOT, Sensors & Wearables



#### #7 Robots

Cons../Comm./Indus., Robots. **Drones & Autonomous Vehicles** 



Customer Journey, Experience Efficiency, Energy Storage Commerce & Personalization



#### #17 Collaborative Tech.

Crowd, Sharing, Workplace & Open Source Platforms & Tools Bionics & Health Care Tech.



#### #22 New Touch Interfaces

Touch Screens, Haptics, 3D Touch,

#27 Edge/Computing

+ Fog Computing



#### #23 Wireless Power



#### #28 Faster, Better Internet

Broadband incl. Fiber, 5G, Li-Fi, LPN and LoRa



#### #4 Blockchain

Cryptocurrencies & DApps



#### #5 Big Data

Distributed Ledger Systems, Apps, Infrastructure, Technologies + Predictive Analytics



#### **#9 Mobile Technologies**

Infrastructure, networks, standards, services & devices



#### #14 Cybersecurity

Security, Intelligence Detection, Remediation & Adaptation



#### #19 Human-Computer Interaction

Facial/Gesture Recognition, Biometrics, Gaze Tracking



#### #24 Clean Tech.

Bio-/Enviro-Materials + Solutions, Sustainability, Treatment & Efficiency



#### #29 Proximity Tech

Beacons, .RFID, Wi-Fi, Near-Field Communications & Geofencing



0101 1011 0110

#### #10 Cloud Computing,

SaaS, laaS, PaaS & MESH Apps



#### #15 Voice Assistants

Interfaces, Chatbots & Natural Language Processing



#### #20 Geo-spatial Tech.

GIS, GPS, Mapping & Remote Sensing, Scanning, Navigation



#### #25 Quantum Computing

+ Exascale Computing



#### #30 New Screens

TVs, Digital Signage, OOH, MicroLEDS & Projections



## Collaborative Robots (Cobots)

#### **Robotic Trends**

- Increasing ease of use, deployment and maintenance
- > Human-Robot Collaboration
- New ways of working with robots
- ➤ Improved robot "senses"
- ➤ Improved ROI
- >Training the robot employees of the future





## Collaborative Robots (Cobots)

### **Robotic Trends**

by side with its human coworkers on the production line assembling street light fixtures.





## 40 Uses for Drones Practical Applications for Unmanned Aerial Vehicles

#### **Emergency Services &** Disaster Recovery



- 1. Disaster & hazmat monitoring
- 2. Emergency delivery (medicine, equipment, supplies...)
- 3. Emergency response coordination (situational awareness)
- 4. Disaster relief & post-disaster assessment
- Search & rescue

#### Security Services



- 6. Crime scene investigation
- 7. Criminal surveillance & tracking
- 8. Police response coordination
- 9. Security surveillance
- 10. Training & evaluation

#### Urban Planning, Real Estate, Architecture & Engineering



- 21. Construction management
- 22. Environmental design (architecture, engineering, landscape architecture, urban
- 23. Mapping (archaeology, resource, topography...) 24. Marketing
- 25. Site analysis, planning &

#### Media & Communications



- 26. Advertising & marketing
- 27. Art (commercial design, fine art, social practice...)
- 28. Entertainment (film, television,
- 29. Investigative journalism
- 30. News photography & videography

#### Agriculture, Aquaculture, Silviculture, Viticulture



- 11. Chemical & biological monitoring (irrigation, pesticides, treatments...)
- 12. Flood & fire detection & monitoring
- 13. Inventory & records
- 14. Pest & disease detection & treatment
- 15. Precision operations & management

#### Environmental Management



- 16. Environmental hazard assessment
- 17. Environmental impact assessment & compliance
- 18. Invasive species & pest control
- 19. Scientific research
- 20. Wildlife & habitat monitoring & protection

#### **Business &** Commerce



- 31. Aero-technology / robotics research & development
- 32. Documentation (accident reporting, building verification, site status...)
- 33. Exploration (water, oil, gas, mineral...)
- 34. Inspection (infrastructure, structural, industrial...)
- 35. Pick-up & delivery services

#### Recreation & Entertainment



- 36. Exploration
- 37. Group activities & events
- 38. Hobby (do-it-yourself & kit building)
- 39. Personal photography & videography
- 40. Remote control flying











## The Impact of 3D Printing

- Changes the nature of inventory
- ➤ Order less often
- Purchase CAD Design, not supplies
- >You print the products/parts as you need them
- > Facilitates product change and large scale production
- ➤ Saves times, labor and logistics costs



















## The Global Business Reality

- Talented *human capital* will be the most critical resource differentiating the prosperity of countries and companies.
- Companies and countries will *compete* for the best and brightest.
- Talent *mobility* is inevitable.
- Global mobility of talent is becoming as *critical* as the global mobility of goods and capital.

## The Global Business Reality

### Why is this Important?

- The ability to *innovate* at an accelerated pace will be the most important capability differentiating the success of countries and companies.
- The *strategic* use of public policy as an enabler of economic development will intensify; placing a premium on collaboration between policy-makers and business leaders.





## The Business Imperative

The business case and return on investment are simply this:

A highly skilled and educated workforce with skills measured and validated by industry standards -

- 1. Reduces risk
- 2. Drives innovation
- 3. Supports competitive advantage





### Critical Need for Educated Workforce

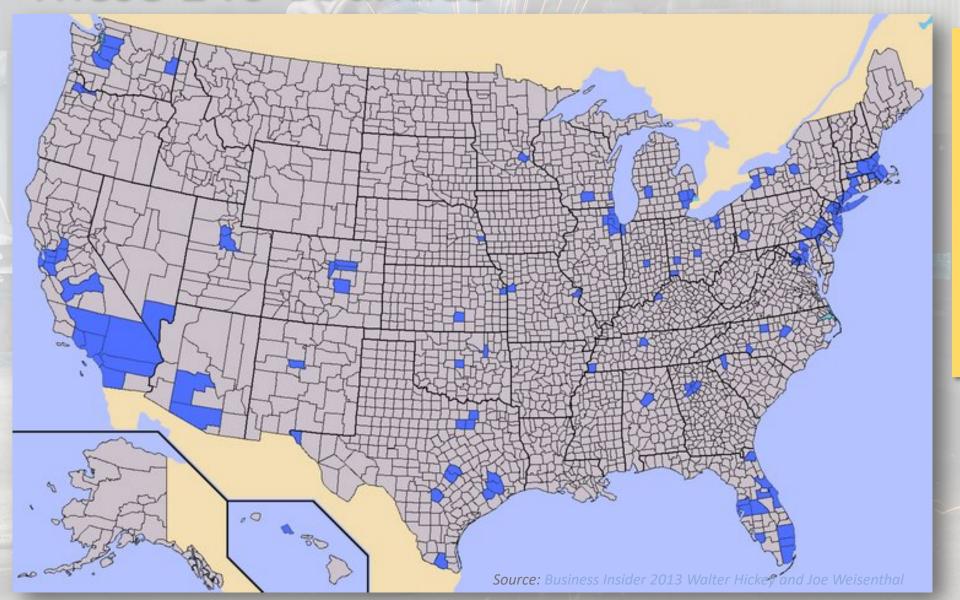
- Excellence in education is becoming a key site selection factor in our "tech economy".
- Focus must be on STEM and "soft" skills, and hands-on experience.
- Greater client demands for highskilled, flexible workforce.
- Insufficient funding of local education programs leaves many communities unprepared for advanced technology.
- Future successful communities will stress an "Education Mindset" over "Low Taxes".

A strong economy begins with a strong, well-educated workforce.

- Bill Owens



## Half of the US Population Lives in These 146 Counties



By 2050,
70% of the
world's
population
will live in
urban
centers.



## Students Require 16 Skills to Compete in the 21<sup>st</sup> Century

#### Foundational literacies

How students apply core skills to everyday/tasks

- 1. Literacy
- 2. Numeracy
- 3. Scientific literacy
- 4. ICT literacy
- 5. Financial literacy
- 6. Cultural and civic literacy

#### Competencies

How students approach
complex challenges

- 7. Critical thinking/ problem solving
- 8. Creativity
- 9. Communication
- 10. Collaboration

#### Character qualities

How students approach their changing environment

- 11. Curiosity
- 12. Initiative
- 13. Persistence/grit
- 14. Adaptability
- 15. Leadership
- 16. Social and cultural awareness



Source: World Economic Forum in collaboration with BCG

Note: ICT = information and communications technology

## There Will Be Fewer Jobs Available for Individuals that Only Possess a High School Diploma

Of the 55 million job openings between 2010 and 2020:

Master's Degree or Higher 6,000,000 10%

Less than a High School Diploma 7,000,000 12%

> High School Diploma 13,000,000 21%

Associate's Degree 7,000,000 12%

Bachelor's Degree

13,000,000

21%

Some College, No Degree 10,000,000 16% Post-secondary
Vocational Certificate
5,000,000
8%



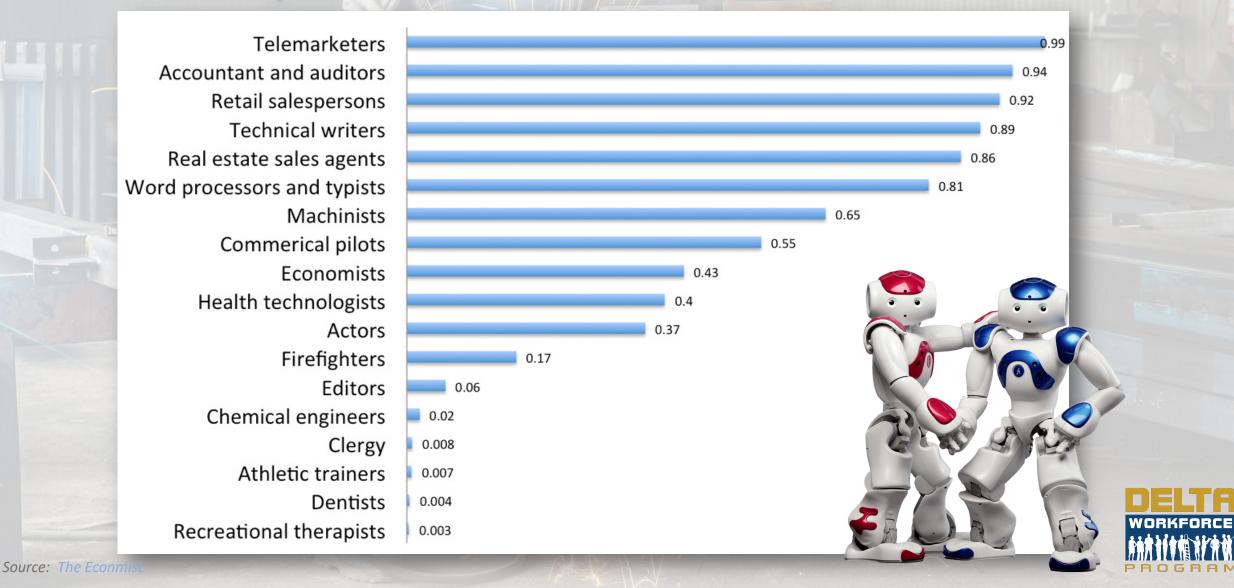
Source: Georgetown University

## Skills Gap: Help Wanted





## Probability Robots Will Take your Job in Next 20 Years, 1 = Certain



## 2018 Retail Closings

- ➤ Bon-Ton 42 stores
- ➤ Toys R Us 182 stores
- > Sam's Club 63 stores
- ➤ Macy's 11 stores
- ➤J. Crew 50 stores
- ➤ Gap & Banana Republic 200 stores
- ➤ Teavana 379 stores
- ➤ Ascena Retail Group 268 stores
- ➤ Michael Kors 125 stores
- ➤ Wal-Mart 154 stores



#### Note:

5,000 Stores Closed in 2017



# Education and Workforce Sustainability: Largest Employer, 2017





Source: www.visualcapitalist.com; November 2017

## Service Industry





"Our device isn't meant to make employees more efficient, it's meant to completely obviate them."

- Momentum Machines







## Place: Inseparable from Workforce Attraction & Retention

#### What is Character?

- Livability
- Attractiveness
- ➤ Uniqueness
- History
- **>** Aesthetics
- **≻**Style
- Desirability
- **Community**
- **Connections**

"The unique characteristics of place may be the only truly defensible source of competitive advantage for regions."

City Vitals CEOs for cities



# The New "Three Legs of the Stool" of Economic Development



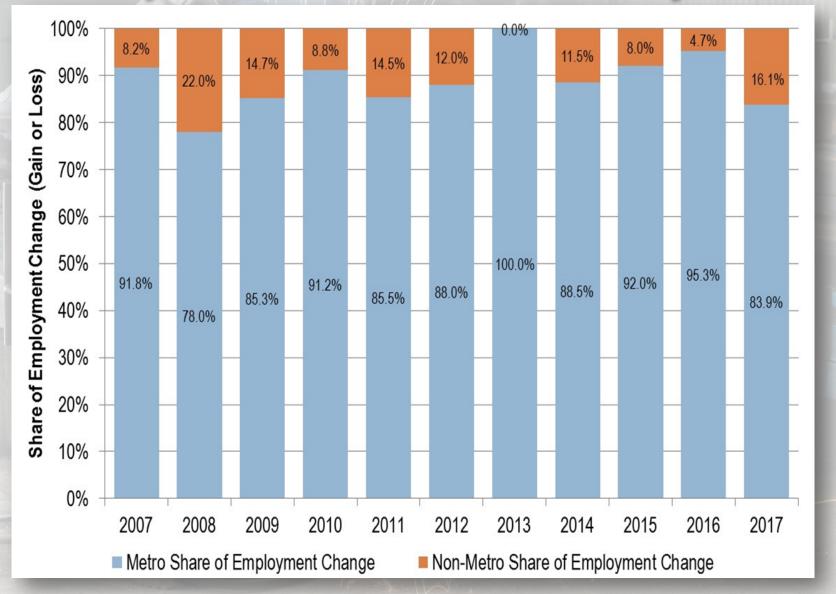
THEN
Traditional 'Three Legs
of the Stool' Focus



## NOW Expanded Focus Integrates Talent and Placemaking



## Regionalism: Ascendance of Metro Areas as Drivers of U.S. Economy





Source: Market Street Services

### Strategy





## Changing Workforce Development

#### **Old Way**

Responsive to rules and systems

Programmatic silos with special populations

Education and workforce are different systems

**Geography matters** 

Technology to track people and results



#### **New Way**

Responsive to employer needs

Flexible, simplified and customized

All efforts are seamless and matriculation is simple

Industry needs matter

Technology to customize, analyze needs, and empower customers



## **Economic Sustainability**

**Definition:** The ability of an economy to support a defined level of economic production indefinitely.

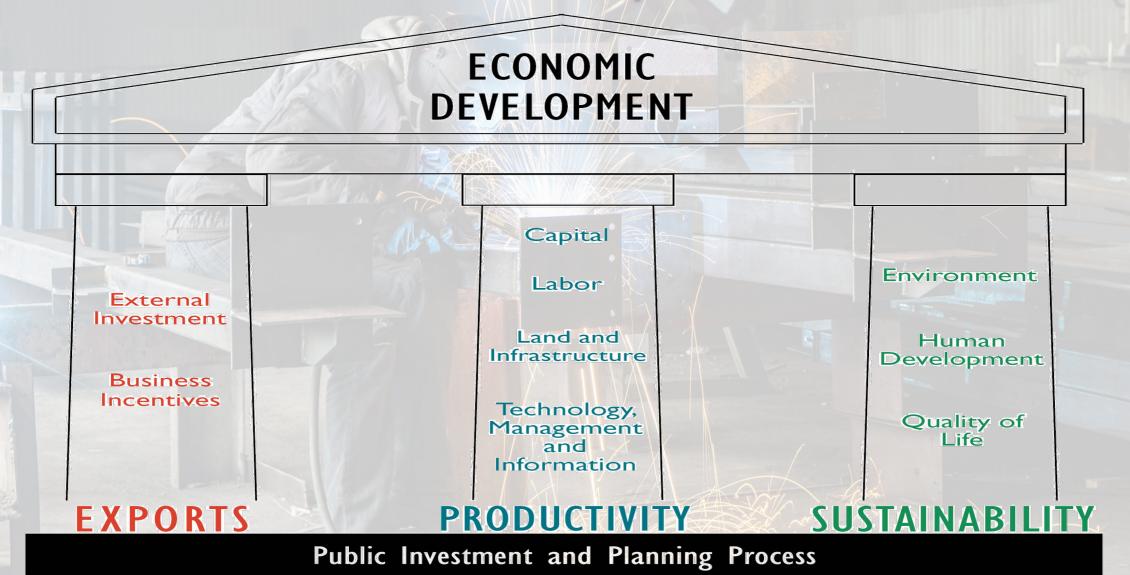
#### Sustainable communities must:

- Build their assets (workforce, infrastructure, services)
- Build the reputation of the community with stakeholders
- > Asses risks and manage them
- > Act in an ethical and fair manner

Economic sustainability is crucial to long term success



## **Economic Sustainability**





## **Effective Strategy Development**

#### What doe successful Communities have in common?

- A commitment to *unite for a better community* and to put aside differences for the common good
- A willingness to accept responsibility for the way things are and the way things will be
- The sharing of a common vision for the future
- >A proactive action-oriented mindset and a clear strategy
- A diverse *participatory community leadership* committed to the future
- A civic capacity and institutional structure necessary to successfully implement a changing strategy



## **Effective Strategy Development**

#### What Can you Do? Locally

- Community colleges and workforce boards will be key as technology disrupts and transforms work
  - ☐ Programs must focus on *retraining*, *upskilling* and *continuous learning*
  - ☐ Higher education must adjust to better serve working adults
  - ☐ Communication among *business and higher education stakeholders* is more important than ever
- ► K-12 Careers Education
  - ☐ Students of tomorrow won't be changing jobs, they'll be changing careers
  - ☐ Flexibility will be key to succeed in tomorrows labor market





#### What Employers Say About Modern Apprenticeships

96% say those who have completed a Modern Apprenticeship are more able to do their job Improving the workforce

920/0 say those who have completed a Modern Apprenticeship were more

able to work with others

760/o say the majority of Modern Apprentices

are new employees

84%

satisfied with the relevance of training

Meeting training needs

82%

satisfied with the communication from the training provider

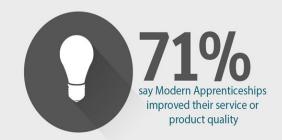
84% of the state o

quality of training

Improving the workplace







Importance to business



say Modern Apprentices are important to their business and workforce development



plan to continue employing Modern Apprentices



would recommend Modern Apprentices within their industry Reasons for employing apprentices



took on Modern Apprentices to improve the quality of training provided



took on Modern
Apprentices to provide
young people with
employment
opportunities



took on Modern
Apprentices to
train them in their
way of doing things





#### **Headquarters:**

236 Sharkey Avenue Suite 400 Clarksdale, MS 38614 662.624.8600

#### Washington, DC:

444 North Capitol Street NW Suite 365 Washington, DC 20002 202.434.4871

dra.gov/workforce

